Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte KENJI OSE

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Appeal No. 2002-1589
Application 09/280,180

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ON BRIEF

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Before COHEN, FRANKFORT, and STAAB, Administrative Patent Judges.

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 18, 20, 21 and 23 through 25. Claims 19 and 22, the only other claims pending in this application, stand objected to, but have been indicated by the examiner to be allowable if rewritten in independent form.

As noted on page 1 of the specification, appellant's invention relates to a bicycle control device which includes a releasable or break-away attachment for a connecting cable. More particularly, the control device is constructed with a resilient portion for deflecting so to release the connecting cable whenever excessive forces are applied to the cable and thereby avoid damage to the control device. A copy of independent claims 1 and 23 on appeal may be found in the Appendix to appellant's brief.

The prior art references relied upon by the examiner in rejecting the appealed claims are:

Kund	5,178,033	Jan. 12, 1993
Chou	5,987,709	Nov. 23, 1999

Claims 1 through 6, 12, 18, 20 and 21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Kund (Figs. 10-14).[1]

[1] Given that the Kund patent issued more than six years before appellant's earliest possible filing date, we are at a loss to understand why this rejection was made by the examiner under 35 U.S.C. § 102(e) instead of 35 U.S.C. § 102(b).

Claims 1, 6 through 17 and 23 through 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kund (Figs. 6-9) in view of Chou.[2]

Rather than attempt to reiterate the examiner's full commentary with regard to the above-noted rejections and the conflicting viewpoints advanced by the examiner and appellant regarding those rejections, we make reference to the final rejection (Paper No. 9, mailed December 14, 2000) and examiner's answer (Paper No. 17, mailed August 29, 2001) for the reasoning in support of the rejections, and to appellant's brief (Paper No. 15, filed August 3, 2001) and reply brief (Paper No. 19, filed December 18, 2001) for the arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to

[2] A rejection of claims 1, 3 through 6, 12, 20 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Allen (U.S. 3,537,328) in view of Uuskallio (U.S. 4,823,752) set forth on pages 4-6 of the final rejection (Paper No. 9) has now been withdrawn by the examiner. See pages 3 and 4 of the examiner's answer (Paper No. 17).

the applied prior art references, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we have made the determinations which follow.

Looking first at the examiner's rejection of claims 1 through 6, 12, 18, 20 and 21 under 35 U.S.C. § 102(e) as being anticipated by Kund (Figs. 10-14), we note that independent claim 1 on appeal is directed to a gear indicating apparatus (10) "for coupling to a control cable having a cable end protuberance attached thereto" comprising: a movable gear indicator (e.g., 104), a member (e.g., 154) for moving the movable gear indicator and having a cable terminating structure (e.g., 290), wherein the cable terminating structure includes a first wall (400) defining a first detenting structure (420) for receiving the cable end protuberance, a second wall (404) spaced apart from the first wall, and wherein at least one of the first wall and second wall includes "a resilient portion for deflecting in response to a pulling force applied to the cable terminating structure by the cable end protuberance so as to release the cable end protuberance from the first detenting structure" (e.g., Figs. 14-15).

Like appellant, we note that the embodiment of the gear display device (80) seen in Figures 10-14 of Kund includes an actuator rack (89) for moving the movable gear indicator (97) and that the patentee describes the actuator rack (col. 4, lines 30-38) as being attached "directly to the shift cable" (11a) via a clamp (91) and screw (90). There is no disclosure in the Kund patent with regard to Figures 10-14 of a shift (control) cable having a cable end protuberance or of any structure of the gear indicating apparatus therein which is designed to receive and cooperate with a cable end protuberance. The examiner's theory that the clamp (91) of Kund corresponds to appellant's claimed cable terminating structure and has a first detenting structure (labeled in Fig. 14 of Kund by the examiner as FDS) that is capable of receiving a cable end protuberance, perhaps in the form of a flat head, is unsupported by any disclosure in the Kund patent and appears to be based on total speculation.

Similarly, the examiner's contention that Kund Figures 10-14 discloses a resilient portion (labeled by the examiner as RP in Fig. 13 of Kund) for deflecting in response to a pulling force applied to the cable terminating structure by the cable end protuberance so as to release the cable end protuberance from the

first detenting structure, lacks any factual basis or support in the applied patent. Moreover, the assertion that the portions labeled by the examiner as FW and SW in Kund Figure 14 "are inherently resilient in nature" and "are deflectable upon enough force actuated by the cable" (answer, page 5) is totally without support in the Kund reference and entirely speculative on the examiner's part. In that regard, it is well settled that inherency may not be established by probabilities or possibilities, but must instead be "the natural result flowing from the operation as taught." See In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981). In the present case, there is no basis to believe that the Kund device necessarily would release a cable end protuberance by resilient deflection as opposed to simply pulling the entire rack (89) out of the device or by some other destruction of the device or rack (89). Thus, neither the Kund patent nor the examiner provides an adequate factual basis to establish that the natural result flowing from following the teachings of that patent would be a gear indicating apparatus like that claimed by appellant.

As for the examiner's position concerning the "bridging wall" set forth in claims 3 and 4 on appeal, we agree with appellant's argument on page 5 of the brief that no such bridging wall exists in Kund.

Accordingly, since all the limitations of appellant's claims 1 through 6, 12, 18, 20 and 21 are not found in Kund, either expressly or under principles of inherency, it follows that the examiner's rejection of those claims under 35 U.S.C. § 102(e) relying on Kund will not be sustained.

Turning next to the examiner's rejection of claims 1, 6 through 17 and 23 through 25 under 35 U.S.C. § 103 as being unpatentable over Kund (Figs. 6-9) in view of Chou, we note that the embodiment seen in Figures 6-9 of Kund discloses a gear indicating apparatus for coupling to a control cable (e.g., slave cable 31b) having a cable end protuberance or bead (32b) attached thereto comprising, a movable gear indicator (e.g., 55b) and a member (37b) for moving the movable gear indicator having a cable terminating structure associated therewith and a first detenting structure (38b) for receiving the cable end protuberance. While the examiner has rejected claims 1, 6 through 17 and 23 through

25 on the basis of Kund and Chou, we note that the only difference indicated by the examiner is that Kund (Figs. 6-9) "fails to show the cable terminating structure as set forth in claims 23-25" (final rejection, page 6). The examiner has made no attempt to inform us as to the differences between Kund (Figs. 6-9) and the subject matter of appellant's claims 1 and 6 through 17 on appeal.

To account for the cable terminating structure set forth in claims 23-25 on appeal and missing from Kund, the examiner turns to Chou. Chou addresses a re-attachable safety connector (e.g., Figs. 13-16) used in conjunction with pull chains like those used for opening or closing a pair of blinds (col. 3, lines 8-13). The problem confronted by Chou is the need to decrease the likelihood of hanging or strangulation which may occur should the pull chain be within reach of a small child who might inadvertently become tangled with the pull chain or blind cords associated therewith. As noted in column 7 of Chou, the re-attachable safety connector (411) is formed of a molded plastic such as polypropylene and constructed in such a manner that at least a portion of the connector adjacent the slots (415) has a flexibility which will easily release the ball of a pull chain

should excessive tension be exerted on the pull chain, thereby providing the safety feature that is the key concept in all of the embodiments of Chou's pull chain connector.

According to the examiner, it would have been obvious to one of ordinary skill in the art at the time of appellant's invention to modify the cable terminating structure of the gear display device in Kund (Figs. 6-9) with the re-attachable safety cable structure of Chou

> in order to provide a safety feature in the gear indicating apparatus wherein the connection between the cable end and the member is severed when a overpowering force is applied on the cable coupling member by the cable end, rather than permanently damaging the internal structure of the gear indicating apparatus. (final rejection, page 8)

Like appellant (brief, page 9), we find no teaching, suggestion, or incentive in the applied references which would have led one of ordinary skill in the art to combine the gear indicating apparatus of Kund and the blind pull chain safety connector of Chou in the manner posited by the examiner. Since we are of the view that the examiner's combination of Kund and Chou is based on a hindsight reconstruction using appellant's own disclosure as a blueprint for combining the clearly disparate

elements of these two patents to arrive at the claimed subject matter, it follows that we will not sustain the examiner's rejection of claims 1, 6 through 17 and 23 through 25 under 35 U.S.C. § 103(a) based on Kund and Chou.

In light of the foregoing, the examiner's rejection of claims 1 through 6, 12, 18, 20 and 21 under 35 U.S.C. § 102(e) as being anticipated by Kund has been reversed, as has the examiner's rejection of claims 1, 6 through 17 and 23 through 25 under 35 U.S.C. § 103(a) based on Kund and Chou.

The decision of the examiner is, accordingly, reversed.

REVERSED

IRWIN CHARLES COHEN Administrative Patent Judge	)	
CHARLES E. FRANKFORT Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
LAWRENCE J. STAAB Administrative Patent Judge	)	

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